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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,442	12/26/2001	Nemmara Chithambaram	G&C 30566.205-US-01	1504

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EXAMINER

HIRL, JOSEPH P

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 03/19/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,442

Applicant(s)

CHITHAMBARAM, NEMMARA

Examiner

Joseph P. Hirl

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-42 are pending in this application.

2. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

3. Examiner's Opinion:

Para 2 above applies. Examiner has full latitude to interpret each claim in the broadest reasonable sense. The preambles of the independent claims need to be rewritten such that tangible embodiment in the technological arts is clearly identified.

Specification

4. The specification is objected because of the following:

Page 2, line 4: delete "--/xxx,xxx," and insert --10/037,805--.

Page 2, line 6: delete "Attorney Docket No. G&C 30566.201-US-01".

Page 2, line 8: delete "--/xxx,xxx," and insert --10/034,440--.

Page 2, line 6: delete "Attorney Docket No. G&C 30566.204-US-01".

Page 2, lines 14-15: delete "Attorney Docket No. G&C 30566.96USU1".

Page 2, line 18: delete "Attorney Docket No. G&C 30566.97USU1".

Page 2, line 20: delete "Application Serial No. 09/628,850" and insert --No.
6,674,445.

Page 2, line 18: delete "Attorney Docket No. G&C 30566.98USU1".

Page 3, line 5: delete "attorney docket No. G&C 30566.110USU1".

Page 3, line 9: delete "attorney docket No. G&C 30566.111USU1".

Page 3, line 12: delete "Attorney Docket No. G&C 30566.112USU1".

Page 3, line 16: delete "attorney's docket number 30566.124-WO-11".

Page 3, line 17: delete "Application Serial No. 09/628,850" and insert --No.
6,337,693.

Page 3, lines 18-19: delete "Attorney Docket No. G&C 30566.172USC1".

Page 12, line 13: delete "--/xxx,xxx," and insert --10/073,805--.

Page 12, line 15: delete "Attorney Docket No. G&C 30566.201-US-01".

Page 18, line 12: delete "--/xxx,xxx," and insert --10/034,440--.

Page 12, line 15: delete "Attorney Docket No. G&C 30566.204-US-01".

These objections must be corrected.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-14

The preamble of claim 1 is written in such a fashion that the character of the approximate location device is not clearly claimed to be tangibly implemented in the technological arts (what is this approximate device location that is in a computer system?). The dependent claims 2-14 embody the fault of the independent claim.

Claims 15-28

The preamble of claim 15 is written in such a fashion that the character of the approximate location device is not clearly claimed to be tangibly implemented in the technological arts (what is this apparatus for refining approximate device location that is in a computer system?). The dependent claims 16-28 embody the fault of the independent claim.

Claims 29-42

The preamble of claim 29 is written in such a fashion that the character of the approximate location device is not clearly claimed to be tangibly implemented in the technological arts (what is this article of manufacture embodying logic?). The dependent claims 30-42 embody the fault of the independent claim.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-42 are rejected under 35 USC 112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a 101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."; In re Kirk, '376 F.2d 936, 942, 153 USIPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 21107.01 (IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-42 are rejected on this basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by LeBlanc et al (U. S. Patent 6,236,365, referred to as **LeBlanc**).

Claims 1., 15., 29.

LeBlanc anticipates determining an approximate location of a device (**LeBlanc**, c 3, l 37-40); reading a rule base that comprises an ordered collection of rules (**LeBlanc**, c 6, l 14-32); capturing an imprecise input (**LeBlanc**, c 6, l 14-32); processing the imprecise input to determine a magnitude of participation of the input in the rules (**LeBlanc**, c 6, l 34-48); applying the rules to the imprecise input based on the magnitude of participation to produce a logical product (**LeBlanc**, c 27, l 42-60); and computing a refined location based on the logical product (**LeBlanc**, c 27, l 42-60;

Examiner's Note (EN): para 2 above applies; Leblanc involves computer implemented analysis (i.e. c 13, l 22-41)

Claims 2, 16., 30.

LeBlanc anticipates gathering empirical data (**LeBlanc**, c 27, l 14-59); and progressively refining the rule base based on the empirical data (**LeBlanc**, c 27, l 42-60).

Claims 3., 17., 31.

LeBlanc anticipates the rule base provides a default rule (**LeBlanc**, c 47, l 42-60).

Claims 4., 18., 32.

LeBlanc anticipates the rule base is configured to reflect regional trends, social trends, or demographic trends (**LeBlanc**, c 28, l 1-5; Examiner's Note (EN): para 2 above applies; the regional trend relates to any localized case which is local and relates a trend).

Claims 5., 19., 33.

LeBlanc anticipates one of the rules utilizes a logical product in an antecedent to determine a consequent (**LeBlanc**, c 27, l 42-60; EN: para 2 applies; if the signal strength is reliable and the strength is weak, the confidence that the signal is coming from the 40th floor is .4).

Claims 6., 20., 34.

LeBlanc anticipates the imprecise input is locational (**LeBlanc**, c 27, l 42-60; EN: location is the 40th floor).

Claims 7., 21., 35.

LeBlanc anticipates the imprecise input is activity profile based (**LeBlanc**, c 27, l 42-60; EN: para 2 applies; voice activity).

Claims 8., 22., 36.

LeBlanc anticipates the imprecise input is temporal (**LeBlanc**, c 16, l 27-38; EN: para 2 applies; radio frequency is time dependent).

Claims 9., 23., 37.

LeBlanc anticipates the imprecise input is spatio-temporal (**LeBlanc**, c 16, l 27-38; EN: para 2 applies; radio frequency is time dependent; propagation path is space dependent).

Claims 10., 24., 38.

LeBlanc anticipates wherein the magnitude of participation is within an interval $[0,1]$ (**LeBlanc**, c 6, l 34-49).

Claims 11., 25., 39.

LeBlanc anticipates a three-valued set is defined for each imprecise input, wherein the three-valued set comprises a truth value, a false value, and an uncertainty value (**LeBlanc**, c 27, l 13-40; EN: para 2 above applies; LeBlanc's Very Strong and Strong represents "truth value", Weak represents an "uncertain value" and a very weak value represents a "false value" as defined by membership functions).

Claims 12., 26., 40.

LeBlanc anticipates the logical product of each rule comprises a value between 0 and 1 (**LeBlanc**, c 6, l 34-49).

Claims 13., 27., 41.

LeBlanc anticipates selecting the rule with the highest logical product (**LeBlanc**, c 27, l 42-51); and using a consequent corresponding to the selected logical product as the refined location (**LeBlanc**, c 27, l 51-59).

Claims 14., 28., 42.

LeBlanc anticipates the refined location comprises a list of candidate locations (**LeBlanc**, c 27, l 60-67; c 28, l 1-15).

Conclusion

7. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Hoffberg, U.S. Patent 6,252,544
- LeBlanc et al, U.S. Patent 5,508,707
- Lin, U.S. Patent 6,205,400
- LeBlanc et al, U.S. Patent 5,602,903
- Akimot, U.S. Patent 5,787,233
- Anglum, U.S. Pub. 2003/0065595
- Brandenburg et al, U.S. Pub. 2003/0063072
- Lazaridis, U.S. Pub. 2002/0169730
- Messmer et al, U.S. Pub. 2001/0039525

- Miceli et al, U.S. Pub. 2001/0035836
- Breed et al, U.S. Patent 6,526,352

8. Claims 1-42 are rejected.

Correspondence Information

Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner, Joseph P. Hirl, whose telephone number is (703) 305-1668. The Examiner can be reached on Monday – Thursday from 6:00 a.m. to 4:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Anil Khatri can be reached at (703) 305-0282.

Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,
Washington, D. C. 20231;

or faxed to:

(703) 746-7239 (for formal communications intended for entry);

or faxed to:

(703) 746-7290 (for informal or draft communications with notation of "Proposed" or "Draft" for the desk of the Examiner).

Hand-delivered responses should be brought to:

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Art Unit: 2121

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Receptionist, Crystal Park II

2121 Crystal Drive,

Arlington, Virginia.

A handwritten signature in black ink, appearing to read 'J. Hirl', written over the address text.

Joseph P. Hirl

March 18, 2004